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RESPONSE UNDER 37 C.F.R. § 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 3600



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named
Inventor : Frank Rosset et al.

Appln. No.: 10/018,602

Filed : April 1, 2002

For : METHOD AND SYSTEM FOR SECURE
AND FAST VOICE
IDENTIFICATION OF A NOMADIC
OBJECT EMITTING AN AUDIBLE
SIGNAL

Docket No.: A56.12-0001

Group Art Unit: 3621

Examiner: Behrang
Badii

RESPONSE AFTER FINAL

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

I HEREBY CERTIFY THAT THIS PAPER IS BEING
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21 DAY OF September, 2005

Dan J. D.

PATENT ATTORNEY

Sir:

This is in response to the Office Action dated May 31, 2005. The Office Action appears to repeat the rejections presented in the previous rejection.

I. INDEPENDENT CLAIMS 1 AND 6

Independent claims 1 and 6 relate to the problem of authentication of a user through a communication network by a service provider. The authentication recited in these claims includes a double check of the user identity, which is achieved:

- firstly by means of a sound emitting mobile object, and
- secondly by the user's voice recognition.

The mobile object emits audible signals, relative to the user's identity, which is received by a microphone, converted into electrical signals, and transmitted to a data processing

service of the service provider. The data processing service manages a database containing users' voice prints, in which it retrieves from the electric signals the location of the user's voice print.

Then, the user transmits phonemes through the same microphone, the data processing service being able to perform the user's voice recognition by comparing directly the phonemes transmitted with the voice print stored.

Thus, claims 1 and 6 perform a user authentication using a double check, each check using a different source of information (a mobile object, and the user's voice), the information being however collected by a unique input device (the microphone). Moreover, the user's voice recognition is achieved as the second identification step, which allows the data processing service to respond in a very short time, since the user's voice print has been retrieved in the database in the first identification step: the phonemes are compared to only one voice print, not to the whole data base contents.

The method and system recited in claims 1 and 6 thus provide a simple, safe, reliable and quick method for a user authentication through a communication network.

II. CITED REFERENCES

A. **Talmor**

Talmor discloses a voice authentication method and a related system. The method uses a remote device where a data base is implemented in order to store voice prints. Information about the user's identity is collected through a first input device, which allows retrieving the user's voice print in the database. Then a temporary voice print of the user is collected through a second input device, notably a microphone, in order to compare the temporary voice print to the stored voice print. In one embodiment disclosed by Talmor, both input devices can be integrated in a single input device, which can be a microphone

(Col. 4, line 20 to 25).

But, Talmor also states that, in this case, "the temporary voice data also includes the user information such that a word or a phrase uttered by the user serves both for user identification and for generating the temporary voice print of the user" (see Col. 8, lines 10-17). This appears to be an important drawback, since the user must pronounce an identification code, and the latter can be heard (especially if we consider that, for a good performance of a voice recognition system, the user is supposed to use a clear and intelligible voice). Moreover, the user needs to memorize or note his identification code, which is a lack of security for an authentication system.

In addition, the user of voice recognition for collecting the user identification is less reliable and more complex than using a card which emits acoustical signals that are much more easily discernible.

Talmor neither discloses nor suggests a method using a single input device (a microphone) able to collect identification signals that are emitted by two different means, namely a mobile object and the user's voice print.

B. Booton and Litman

Booton and Litman were discussed in detail in the previous amendment. Neither of these documents disclose or suggest a double check method using the combination of a mobile object and of the recognition of the user's voice print, both information, acoustical signals emitted by the mobile object and the user's voice, being collected through a single device, namely a microphone.

Considering the above comments, it appears that the inventions recited in claims 1 and 6 provide a more secured and simple method and system than that of the prior art, which are not obvious in view of the cited documents. Applicants therefore

respectfully request that the rejection of claims 1 and 6 under §103(a) be withdrawn.

Likewise, dependent claims 2-5 and 7-10 are patentable with the allowance of their respective independent claims.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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